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BULLETIN

OF THE

Mississippi Agricultural and Mechanical College

AGRICULTURAL COLLEGE, MISS.

PART I. INDUSTRIAL EDUCATION:
School Garden
Manual Training
Domestic Science

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NATURE STUDY—AUDUBON SOCIETY IN STUDY OF INSECTS AND BIRDS

"There is nothing in all the world so important as children, nothing as interesting. If you ever wish to go in for philanthropy, if you ever wish to be of any real use in the world, do something for children. If you ever yearn to be truly wise, study children. We dress the sore, bandage the wounded, imprison the criminal, heal the sick, and bury the dead; but there is always a chance that we can save a child. If the great army of philanthropists ever exterminate sin and pestilence, ever work out our race's salvation, it will be because A LITTLE CHILD HAS LED THEM."—Jordon.

MISSISSIPPI A. & M. COLLEGE

SUMMER SCHOOL
For Teachers

JUNE 8 TO JULY 16, 1915

"EDUCATION FOR VOCATIONAL AND SOCIAL EFFICIENCY."

Complete System of Education in Operation:

Kindergarten in Model School,
Common School Studies,
High School Classes
Agricultural High School Courses,
College Courses,
Postgraduate Work.

Agricultural College, Miss.

READY FOR WORK.

By MISS ADA JOYCE FOSTER.

The Model School of the Mississippi Agricultural College, though still in its infancy, has cause to congratulate itself upon the character of work done and the success of that work,—one of its attractive features being the Model School Gardens.

Beginning with the tiniest tot, the children have worked with an interest and intelligence that have given added enthusiasm to instructors and directors.

Each child, with its own set of tools and its own individual garden plot, has felt a supreme ownership; knowing that whatever he raised, be it fruit, flower or vegetable, was his to dispose of as he chose, has added a zest to his work that has made him feel that even one evening missed from the School Garden was nothing short of a calamity. School Gardening, to be a success, must have in mind as a primary foundation, the environment of the child, his home surroundings, the campus, the adjacent country, and, of course, the School Garden, thus bringing the child's home and school life into very close contact, giving his inherent craving for activity a safe and useful, as well as a very fascinating outlet, which results in a strengthening of observation.

He learns to think for himself. He solves the problems of his home and school life in an intelligent manner. He learns truths by applying them, and, best of all, is happy in the learning.

There mere accumulation of dry facts is a very dry business even to an adult, and many facts thus accumulated are never applied.

In the Garden work we deal with the objects themselves. With his own hands the child makes experiments, gathers together literally, objectively, what he has learned in making his seed collections, etc. With his own eyes, he sees the truths that Nature unfolds.

Starting in the primary grades with the child's immediate surroundings, his knowledge progresses with the need of the pupil and his development, using all the material to be found at hand.

Because of this character, because the work must depend on the material at hand, there can be no set order of things. Time, season, and facilities must govern it entirely.

Because of it one school cannot copy another. One school can only be a light thrown out to another in greater darkness.

Garden work begins the Nature Study.

Excursions with the children to learn the names of trees in immediate vicinity; their use to man, shape of leaf, contour; insects that prey upon them; trees as home of woodland creatures; food the trees require; length of life, etc.

STUDY IN SEED AND SEED GERMINATION.

Study of Flowers.—At home, in the greenhouse, or in the school gardens; the ability to name the flowers from blossom, from leaf; which have fragrance; use of fragrance; parts of flower, pollination, how, and through what agency; purpose of bright colors; use of nectar.

Insects.—Those which are our friends, those which are foes; this leading to:

Birds as the Farmer's Friends.—Organizing of Junior Audubon Society of Agricultural College of Mississippi. The birds which are friends, those which are foes; stressing importance to farmers of protecting bird friends; their habits; why we regard them as friends; what birds frequent the campus, how and where they build; making of houses for them; the erecting of houses at home or on the campus.

Now, for the children's greatest delight, for the actual laying out and planting of the individual garden plot.

All work, in so far as possible, must be done by the pupil. The measurements of the garden plot; preparation of soil, laying off of rows, planting of seeds, gives the garden an irresistible charm and makes him feel his ownership.

For the first three grades, ground is prepared by the older pupils, and as they obtain knowledge, they are accorded the honor of instructing the younger children.

Nor, in our Model School, is the child the only beneficiary. The college student who is preparing himself to go out into the schools of Mississippi to build citizenship for his state, knowing her for an agricultural state, and that as agriculture is fostered or retarded, so will Mississippi progress or retrograde, takes hold of the proposition, and in actual practice, organizes and instructs these little workers in a phase of school life that, in Mississippi, is in its embryonic state.

He does, first hand, what the greatest educators of the age have done, learns childhood by studying the child; learns to impart his wisdom to babes, the true test of real wisdom.

The work is divided, the lower grades forming a group which receive instruction on Tuesday and Thursday, and the more advanced grades on Monday, Wednesday and Friday.

To all grades instruction is given as to:

Hot-bed construction; planting, and care; preparation of soils on plats; use of term "fertile" as applied to soil, what makes soil; kinds of soil; measurement of school garden plot; laying off of rows; recognition of different seeds, study of size, shape and color; parts of seed, as germ, stored food, husk, etc.; germination as seed test; depth required for each variety; what seeds are put directly into the ground; what seeds transplanted from hot-beds.

Note made of date of planting; note of date of sprouting; date of maturity; time taken from planting to maturity.

Methods of transplanting. The "why" of puddling. The reduction of leaf surface, and why. Depth to which plants are set in transplanting. Methods of shading, and why shading is necessary.

Names of vegetables: Learning to recognize all plants and call by name. Parts of plants, as root, stem, leaf, etc. Differences between monocots and dicots. What a cotyledon is. Which plants leave the cotyledons in the ground and which do not. Use of cotyledons. How to thin to a stand and when.

Use of roots: How they grow. Where root hairs are found; how they grow and their use.

Name of the green coloring matter in the leaf and stem. Life purpose of all plants.

Insects found in the garden: What two classes we had to fight and how we fought them.

Softwood cuttings made by all grades: How cut and when. Why put in sand and how.

More Advanced Work.

Begins with the third grade and up. Instruction is given as to:

Family to which each vegetable or flower belongs. Its economic importance. Best varieties for early and late crops. Best for spring and fall planting.

Different varieties suited to each season: What different plant foods do roots get from the soil. Which plants have nitrifying bacteria on roots. How food is prepared for roots to take up. What food plants take from the air. How it gets it. Why cabbage have heads and turnips have large roots.

Studying Insects.—The more advanced grades learn to use Paris green and other insecticides, learning the proportion, themselves, doing the mixing and each applying to his own garden.

Fertilizers are taken up.—What foods our soil is deficient in, therefore, what fertilizer to apply. How to mix it. Methods of applying. Experiments made, fertilizing part of the row, leaving part unfertilized, to test value of the fertilizer. What food each fertilizer supplies. What had to happen before the plants could use the cotton seed meal, ground bone, nitrate of soda

Bacteria.—What it is, and how it acts on the soil, etc. What plants have nitrogen bacteria on the roots and which do not.

Moisture.—What plants give off besides moisture. Necessary conditions for plant growth; what happens to root hairs if too wet;

what remedy for excess of moisture; what happens if too dry, and what remedy is to be used.

New Varieties of Plants.—How obtained. How the type is fixed. What hybridizing is, and how it is done.

Cuttings.—Hardwood and softwood; when taken; where from and how.

Daily use of labor-saving tools, as Planet Jr., and Iron Age seed drills, wheel hoes, etc.

OUR CREED.

"I believe in permanent agriculture, a soil that shall grow richer, rather than poorer, from year to year.

"I believe in a hundred bushel corn and fifty bushel wheat. I shall be satisfied with nothing else.

"I believe that the only weed is a dead weed, and that a clean farm is as important as a clean conscience.

"I believe in the farm boy and the farm girl, the farmer's best crop and the future's best hope.

"I believe in the country school that prepares for country life and a country church that prepares its people to love deeply and live honorably.

"I believe in the country woman, and will do all in my power to make her life easier and happier.

"I believe in the community spirit, a pride in one's home and one's neighbors. I will do all in my power to make my own community the best in the state."

PRACTICAL WORK IN POTTING OF PLANTS.

INDIVIDUAL GARDENS.

By Miss Ada Joyce Foster.

	FALL.		SPRING.
42 Feet	Blue Grass		Nasturtium
	Nasturtium		Coxcomb
	Zinnia		Gladiola
	Aster		Zinnia
	Crimson Clover		Onion
	Onions		Carrots
	English Rye		Cabbage
	Spinach		Turnips
	Turnip		Lettuce
	Cabbage		Beets
	Vetch		Radish
	Beet		Egg Plant
	Radish		Snap Beans
	Wheat		Irish Potatoes
	Carrots		Pepper
	Mustard		Garden Peas
	Garden Peas		Tomato
	Oats		Soy Beans
	Snap Beans		Sweet Corn
	Collards		Cow Peas
	Rye 2 ft		Field Corn
	9 Feet	3 Feet	9 Feet

COMMUNITY FLOWER GARDEN.

By Miss Ada Joyce Foster.

42 Feet	Sweet Peas			Sweet Peas
	Sweet Peas	4 ft.		Sweet Peas
	Canna			Canna
	Dahlia			Roses
	Dahlia			Roses
	Peony			Iris
	Peony	2ft		Iris
	Rudbeckia			Gladiola
	Rudbeckia			Gladiola
	Hardy Mums			Tuberose
	Hardy Mums			Tuberose
	Phlox			Zinnia
	Vinca			Verbena
	Garden Pinks			Nasturtium
	Daisy			Nasturtium
	Violets			Violets
3 Feet	9 Feet.		3 Feet	9 Feet.

By A. B. McKAY.

No apology is offered for presenting this Bulletin to teachers in the public schools of Mississippi. In both rural and urban schools throughout the state the School Garden is rapidly gaining recognition as being second to no study in school work.

While as yet comparatively few schools have inaugurated garden work, a number of teachers have reported excellent results. From the numerous letters and inquiries that have come to my desk it is evident that many teachers who have had but little if any training in school garden work hesitate to assume duties and responsibilities for which they have not qualified. Many willing teachers indicate that they would gladly undertake garden work if assured of some encouragement and co-operation from patrons, superintendents and school boards. If the suggestions herein offered shall be the means of aiding teachers who need help, or if this Bulletin shall point the way to any who may wish to qualify for more efficient service, it will have accomplished its mission.

It is as natural for children to love the out-of-doors as for sparks to fly upward. Environments have much to do with the character of their physical, intellectual, and spiritual development. Children imitate what they see other children and older people do. For example, take some bright eight-year-old boy and his equally bright sister. They were reared, we will say, on a well appointed, well kept farm. They decide to reproduce that farm in miniature. After a few moments spent in planning they will busy themselves collecting such materials as may be found about the premises. They find a little open space, a pile of sand, a discarded shovel, a few tin cans, cobs, and brick bats, some reeds, and old boards. They are now ready to execute their plan and play-work begins in earnest. The quiet observer must wait only a short while to see pictured in the allotted space, pasture land and meadow, garden, orchard and cultivated fields, the dwelling, and other buildings, all properly disposed and enclosed. A few moments later flocks and herds may be seen grazing near the stream in the valley, and men and teams at work on the hillside. While these country children are thus engaged, their city cousins may be as deeply absorbed in planning and in picturing scenes characteristic of the city in which they live.

The children to which we have just referred used inert, lifeless materials. How different when, under favorable environments and instructed and directed by competent and enthusiastic teachers, they begin to handle and to study living, growing things!

Strange as it may seem, few children of school age, even where they come from the best farms and country homes, have ever had their attention called to the simplest problems which have to do with

REWARD OF SERVICE.

plant and animal life. Constant contact with the vegetable world has, of course, enabled them to call by name the more common plants, vines, and trees growing in garden, field, and forest. Intuitively they may have learned a good deal from handling domestic animals and, in a general way, know something of a few insects, birds, and wild animals. This dry, matter-of-fact, superficial knowledge is of little value and awakens but little interest so long as the child remains practically ignorant of the simple, easily understood principles which govern and control plant and animal growth. Parents qualified to instruct their children along such lines fail to do so for the same reason that they do not instruct them in English and mathematics. As a rule they are willing to consign such work entirely to school teachers. Thus it happens that town and city children and practically all children from the country, receive their first lessons in Agriculture after entering school.

Logically, the study of Agriculture should begin with the school garden. An eminent authority says, "It is a fundamental prerequisite to all true nature-study." Very few schools can have access to animals in nature-study. Plants are much more easily provided. The study of plants leads up to the study of animals. In the school garden the child soon learns to discriminate between insect friends and enemies, and how to protect the one and combat the other. The study of insects in connection with the plants upon which they feed, or of insects that prey upon other insects, awakens in the child mind an interest never before dreamed of. Here it sees and knows and studies these busy little creatures in their true relation to other created things. Here, too, the child becomes, in the same way, acquainted with the birds that frequent the garden in search of insect and plant food.

The teacher in any school, large or small, rural or urban, who attempts to instruct in nature-study, and, more especially, the agricultural phases of it, without the aid of a school garden, is certainly very much handicapped. The school garden is the laboratory in which the real problems must be studied, worked, out and verified. In any school that purposes to teach agriculture the teacher or teachers to whom this subject is assigned can provide ways and means for at least a small beginning in garden work. To any who doubt this statement I wish to press this question: Have you made an earnest, honest effort? If not, are you willing to try, following the suggestions offered and others that will present themselves to you as work progresses? If you have determined to start the work, begin with the children. Take them into your confidence. Plan and talk the matter over with them. Follow up any interest and enthusiasm that may have been awakened.

The children will let their parents know of the proposed project. Listen to what they have to say and note carefully any points of vantage. Some, perhaps the majority, of the patrons will oppose or fail to lend encouragement. This is to be expected at the start. Do not for one moment become discouraged. Continue to encourage and plan with the children, even in the face of opposition. Agitation and organized effort are necessary in launching any new enterprise. Stand by the children, and together you will win. When the working plan is fully understood by all concerned and the time has come for action, the children will volunteer to contribute a large percentage, if not all, of the really necessary materials. Some will bring seed, bulbs, cuttings, and plants; others, the necessary tools and implements; still others will be in position, perhaps, to contribute boards and nails for the construction of plant boxes and seed frames. Surely some public spirited merchant in the village or town, if properly approached, will be only too glad to supply any seed or garden tools lacking. Some dealer or farmer, seeing the need of commercial fertilizer or manure from the barnyard, will gladly supply these materials.

If the school grounds are small, use any available space about the entrances and ells of the building, vacant corners or unoccupied strips near the boundary lines, and any other land not absolutely needed for play-grounds or other necessary service. Provide window boxes and smaller containers for pot plants. If you still lack space, interest the property owners whose land is adjacent to the school yard, and, for a reasonable compensation, if it can be secured in no other way, rent or lease the most desirable land available for garden work. From the sale of vegetables the children will aid, if necessary, in paying for the use of the land. If in the village or town, some unused lot within reach of the school building may be had on terms similar to those just mentioned.

The uninformed teacher should consult the most successful gardeners and farmers in the neighborhood as to the details of soil preparation, seed planting, cultivation, etc. Bulletins from the State Experiment Station and from the U. S. Department of Agriculture may be had free of cost. Current magazines, farm journals, and the daily newspapers abound in useful hints and suggestions on garden and farm topics. Will not some teacher at every school in Mississippi that, as yet, has no school garden volunteer to undertake this work? Will you not begin now, today, and, a little later, advise me as to your plans and progress; and, at the close of session, report results? Possibly the A. & M. College may be in position to render valuable service?

The question is frequently asked, "At what age should the child begin school garden work?" In the "Model School" on the A. & M.

BUSY IN THE SCHOOL GARDEN.

College campus, there are thirty to thirty-five children ranging in age from four to twelve years. Each child in this school has an individual plat of ground. Nothing connected with school duties interests these children more than their garden work. Without exception, from the brightest to the dullest in school, they are always ready and glad when the time comes to go to the garden. It is no uncommon thing to see them busy on their plots out of school hours. Not infrequently they will leave the play grounds to visit the garden. If not at work they will spend the time studying their own plants and comparing them with plants of the same kind on other plats. It is a noticeable fact that children just a little too sick to attend school are inclined to get much better before the hour for garden work. In more than one instance, recently, the prudent (?) mother has decided that, under such stimulating influences, it was best for the child—and the mother—that the garden lesson should not be missed. "Mother, they are going to plant beans this afternoon. If I am not there to plant my beans today and if it should rain next garden day I'll be 'way behind. Mother, it won't hurt me. Please let me go and plant my beans." It is hard to resist such pleading.

When these children began garden work more than a year ago, some said, "The novelty will wear off after a little while, and they will lose interest in the work." Interest did not wane with the spring garden, and they were even more eager to begin their fall planting. They are now busy with spring work again, and the "novelty" is no less novel. It will not "wear off" this spring nor the next.

A few days ago a lady said to me, "I should like to have a nice evergreen hedge between my residence and that of my near-by neighbor." Her eight-year-old son, pointing to some hedge plants not far away, said, "That is the kind of hedge you need; let me tell you how to get it." Starting with the details of hedge-making, he recited accurately and in logical order the process from the making of cuttings to the planting, cultivating, and pruning of that kind of hedge. It had been more than two months since he had practical lessons in hedge making. He may forget the time, the place, and the instructor who drilled him in the details of this work, but he will know how to make and care for hedges as long as he lives. And so with hundreds of other practical lessons concerning garden and field plants which he and the other children have learned during the past year in their school garden. These children helped to plant and to cultivate several home gardens on and near the college grounds last season, and they will enter more heartily into this work this season. They are glad of an opportunity to show their parents by actual practice what they know of the details of growing garden vegetables. And they are just like other children of the same age in all other schools in Mississippi.

Boys and girls who learn in childhood to love and care for animals and plants will never be alone when left to themselves in the great out-of-doors. Their constant desire will be to know more and more of these interesting objects, which, from association, will continue to present to their minds new matter for thought and investigation.

What golden opportunities are here presented to the earnest and enthusiastic teacher who is trying to find the child and who is endeavoring to aid the child in finding himself! What incentive to such a teacher to so qualify as to be able to tell in an intelligent and attractive manner to children the life story of each plant, insect, bird, and animal presented for study! And above all, what an inspiring thought to be able to so guide and instruct children committed to your care as to create in them an undying love for and interest in these living, growing, moving things!

What was suggested a while ago as ways and means for inaugurating garden work in schools not provided with necessary equipment applied only as a beginning, simply a means to an end, something to awaken interest and lead to better things. The time is at hand when no school will attempt to give instruction in agriculture until provision has been made for a properly equipped school garden. Starting with the younger pupils and with the individual plat, garden work will be so planned and graded as to advance the pupils as they progress in other studies. Plot work and field tests must, necessarily, go hand in hand with class-room instruction throughout the entire course. As the pupils advance the more enterprising boys will be looking forward to the time when they will join the corn, pig, and poultry clubs; the girls will be as anxious to become members of canning clubs and other branches of domestic science work. Surely, with such systematic training, worthy boys and girls will naturally take to club work, and they will be, in every way, better qualified to excel.

Upon the teachers in the public schools of the State rests the responsibility of preparing the children committed to their charge for life work and citizenship. What a responsibility! Teachers, one and all, are you qualified and will you continue to so qualify as to be equal to such responsibility? Are you so arranging the school curricula as to pander to the few, who, because of better environments, will complete their education in higher institutions of learning, or are you preparing to elevate the masses to the highest possible educational level? Of the pupils now in your primary grades, how many will enter and finish the next higher grades? What percentage of those now attending the consolidated schools and the high schools in the villages and towns of the state will pass from these to the agricultural high school, or to the higher state or denominational institutions? Will not the majority of pupils now attending **your** classes end their school days with you and go forth to begin life's work on the foundation **you** have laid for them? What have **you** done and what are you doing for these pupils?

Mississippi is an agricultural state, and will remain an agricultural state, doubtless, until the end of time. Her wealth must come almost wholly from her agricultural products, and by far the majority of her population must engage in agricultural pursuits. The rapidly increasing interest in agricultural education means that agriculture as a study is now in the public schools of the state to stay. I would not underrate the importance of English, mathematics, or any other study now in the curricula of the public schools of Mississippi, but I would stress the importance of giving due prominence and attention to the basic studies upon which success in agriculture rests. Suppose that every boy and girls graduating from the public schools in Mississippi were well instructed in the principles of agriculture, would the time given to this subject be lost, or would this knowledge be of no value to those who will engage in other pursuits? How many lawyers and doctors of your acquaintance might use such knowledge to pecuniary and physical advantage in the garden, orchard or flower yard while waiting for clients or patients? How many merchants, bankers, men and women confined in store or office during business hours, ministers of the gospel, and school teachers might receive substantial benefit, physical and mental, from a short time spent each day caring for grounds devoted to vegetables, fruits or flowers?

The study of agriculture was introduced into the public schools of Mississippi only a few years ago. Because of this fact the demand for qualified teachers in branches relating to this subject is far greater than the supply. Because of this lack of qualified teachers many schools are employing incompetent men and women to handle agricultural subjects. Until more teachers now engaged in school work qualify for handling these subjects, it might be better, for the present, to leave the study of agriculture out of such schools as cannot secure competent teachers. Many of the students who graduate in agriculture from the Mississippi A. & M. College go directly to the farm. Some go into demonstration work. Some engage in school work, and some, as in other departments of this and other institutions, engage in other work than that for which they are supposed to have trained. But suppose that all of the graduates from the A. & M. College in the Departments of Pedagogy and Agriculture for the next ten years to come were properly qualified and were to find places as teachers of agriculture in the public schools of the state still others would be needed.

PEDAGOGICAL STUDENTS IN OBSERVATION.

Do not entertain for a moment the idea that a teaching knowledge of botany, entomology, or school gardening can be obtained from reading a few books and bulletins on these subjects. Books have their place, and by no means an unimportant place, in agricultural instruction, but an intimate acquaintance with the soil and its management and with animals and plants is indispensable.

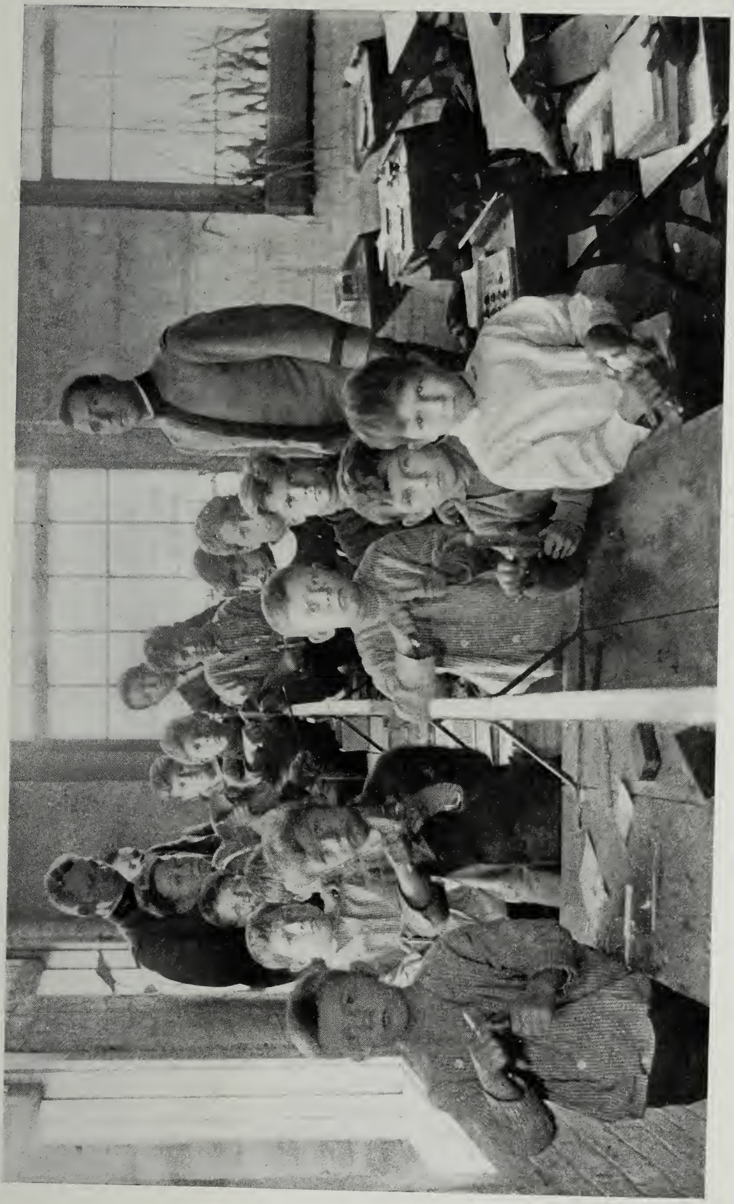
Appreciating the importance and the need of such aid as will look to the better qualification of teachers in agriculture, the management of the A. & M. College established the "Model School" on the campus, and has taken further steps through the Extension Department to render assistance to teachers who will take advantage of the facilities offered. The little school mentioned is operated (1st) for the benefit of students in the Pedagogical Department of the College who are now training to become teachers, and (2nd) for teachers who can arrange to be at the College during the regular session and for those who attend the Summer Normals. In the school garden the pedagogical students take, as a part of their practical or laboratory work, the directing of the children under the guidance of Miss Foster and her helpers. Thus they gain a practical knowledge of how to instruct children, and, at the same time, learn the art of making school gardens.

The Department of Horticulture has placed at the disposal of these students and teachers the entire equipment of the Department—garden, orchard, vineyard, campus, and grounds, hot beds, cold frames, greenhouses, laboratory and class rooms. Surely no such horticultural equipment can be had at any other institution of learning in the state. The Departments of Poultry, Animal Husbandry, Dairy, Manual Training, Experiment Station, and other industrial departments of the College have also placed their instructors and equipment at the disposal of these students and teachers. Such advantages for study and practice can not fail to be of invaluable service to any teachers who can arrange to receive instruction here in these various lines of work. The Mississippi A. & M. College stands for industrial education and is in position to aid teachers who apply for such work.

By V. W. BRAGG.

Educators are turning rapidly to vocational and industrial training.

The Mississippi A. & M. College since its foundation has laid emphasis on the application of the sciences to Agriculture and to the mechanic arts. Only recently, however, has the College offered courses that will enable the student to teach school gardening, knife work, and kindred subjects in the public schools of the state.



KNIFE WORK.

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Every child, from the kindergarten up, should have to do some kind of practical, manual work; to make things with the hands is the first creative instinct of the average boy or girl.

This longing to do things is unfortunately often damped in the schools by cold academic studies. Manual training in the crafts, however, interests the child from the outset. If the interest is sustained through the lower grades and then through the high school, where shops and domestic science rooms are well equipped; the child will not only gain an abiding love for manual work but develop precise and systematic habits; he will, in short be well on the way to great usefulness to society. It is by no means true that since the hands are continuously being trained the mind is being neglected. On the contrary, activity of the mind always comes with, indeed is largely the result of, activity of the body.

Through the study of the arts and crafts the child may find his bent. If the lessons learned in the garden, at the forge, or at the bench stay with him in his professional life, he will inevitably be a better teacher, lawyer, artist or physician than he would have been without this fundamental knowledge of the activities of modern life.

At the A. & M. College we are laying much stress on the arts and crafts. This is because we want the people of Mississippi to know at once that it is necessary to send the whole child to school. To attempt to develop the intellect, without training the hand and the eye—to train some of the faculties to the injury, perhaps, of others—to fail to get the highest development of the whole child is a needless error and a pedagogic calamity.

Manual training in the crafts begins naturally in the primary school; and it is there that we are daily proving the advantages to be derived from this kind of training. In the A. & M. Model School, a part of the School of Industrial Education, paper-cutting, sewing, weaving, whittling, and kindred art-craft subjects are regularly taught; thus affording our young men in the School of Education an opportunity prior to graduation to observe primary class-work and to teach elementary arts and crafts.

Manual, or vocational, training is no panacea for educational ills. It is however an elemental force in education, and is necessary to meet the demands of modern citizenship. By it, as by no other kind of training can the energies of the child be so easily and successfully directed into channels that contribute to physical, intellectual, and spiritual well-being.

The past you inherit. The future you create. You are therefore urged to come and see what manual arts and school garden work can do for Mississippi. Come—help us to create for our State a modern school life, a school life that shall be a worthy heritage for those who shall come after you.